

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L7	39	((LED or LEDs or (L E D) or (light (emitting or producing or generating or radiating) (diode or diodes or device or devices or element or elements or semiconductor or (semi conductor) or (circuit element)))) and (housing or housin or housed or casing or casin or case or shell or container or box or boxes or enclosure or enclosures or cover or covers) and (refractor or refractors or lens or lenses or ((optical or transluscent or translucent or transparent or (optically active)) (element or member or component or device))) and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (heat (sink or ((extracting or conducting or dissipating or transporting or radiating) (fin or protrusion or projection or element or member or spike or tubes or fingers or portion or pillars or plate)) or plate))) .clm.	US-PGPUB	ADJ	ON	2006/10/20 13:28

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2840	(362/294,300,373).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/10/20 13:24
L2	487	(362/494).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/10/20 13:24
L3	3	1 and 2	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 13:25
L4	1978	(362/800).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/10/20 13:25
L5	26	2 and 4	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 13:25
L6	27	3 or 5	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 13:25

EAST Search History

L7	39	((LED or LEDs or (L E D) or (light (emitting or producing or generating or radiating) (diode or diodes or device or devices or element or elements or semiconductor or (semi conductor) or (circuit element)))) and (housing or housin or housed or casing or casin or case or shell or container or box or boxes or enclosure or enclosures or cover or covers) and (refractor or refractors or lens or lenses or ((optical or transluscent or translucent or transparent or (optically active)) (element or member or component or device))) and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (heat (sink or ((extracting or conducting or dissipating or transporting or radiating) (fin or protrusion or projection or element or member or spike or tubes or fingers or portion or pillars or plate)) or plate))).clm.	US-PGPUB	ADJ	ON	2006/10/20 13:28
L8	340	(362/300).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/10/20 13:29
S1	1169	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/04/21 11:45
S2	10	((362/800).CCLS.) and ((vehicle or auto or car or automobile) and (high adj intensity) and (heat adj sink))	USPAT	OR	OFF	2004/09/03 14:56
S3	13	("3474381" "4124881" "4654629" "4680678" "4893223" "4929866" "4977487" "5006971" "5084804" "5101326" "5162696" "5319531" "5436809").PN.	USPAT	OR	OFF	2004/09/03 14:52
S4	38	"5567036".URPN.	USPAT	OR	OFF	2004/09/03 14:53
S5	612	(362/488,494,545).CCLS.	USPAT; USOCR	OR	OFF	2004/09/03 14:57
S6	136	((362/800).CCLS.) and ((362/488, 494,545).CCLS.)	USPAT	OR	OFF	2004/09/03 14:57

EAST Search History

S7	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2004/09/03 15:18
S8	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2004/09/03 15:19
S9	0	((362/800).CCLS.) and (chip and refelctor and (heat adj sink))	USPAT	OR	OFF	2004/09/06 15:31
S10	21	((362/800).CCLS.) and (chip and reflector and (heat adj sink))	USPAT	OR	OFF	2004/09/06 15:31
S11	84	((362/800).CCLS.) and (high adj power)	USPAT	OR	OFF	2004/09/06 15:32
S12	0	((362/800).CCLS.) and (refelctor or refelctive)	USPAT	OR	OFF	2004/09/06 15:33
S13	471	((362/800).CCLS.) and (reflector or reflective)	USPAT	OR	OFF	2004/09/06 15:33
S14	1169	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2004/09/06 16:53
S15	23	"3821590".URPN.	USPAT	OR	OFF	2004/09/06 15:36
S16	4	("3510732" "3860847" "4035681" "4070568").PN.	USPAT	OR	OFF	2004/09/06 15:38
S17	9	("3354316" "3400311" "3404319" "3419762" "3510732" "3528169" "3676668" "3696263" "3739241").PN.	USPAT	OR	OFF	2004/09/06 15:39
S18	22	"3510732".URPN.	USPAT	OR	OFF	2004/09/06 15:40
S19	1	("3458779").PN.	USPAT; USOCR	OR	OFF	2004/09/06 16:52
S20	211	((362/800).CCLS.) and aluminum	USPAT	OR	OFF	2004/09/06 16:53
S21	1265	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2005/03/28 16:37
S22	148	S21 and ray	USPAT	OR	OFF	2005/03/28 16:37
S23	3	S22 and Ray.inv.	USPAT	OR	OFF	2005/03/28 16:37

EAST Search History

S24	18	"054,633"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/04/22 12:05
S25	1300	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2005/06/01 08:28
S26	0	S25 and (stepping near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:28
S27	1	S25 and (step near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:29
S28	60	S25 and (transformer)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:29
S29	10	S25 and (step adj up)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:34
S30	0	S25 and ((step adj up) near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:29
S31	256	(step adj up) near current	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:34
S32	37	S31 and (LED or (light adj emitting adj diode))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 08:34
S33	127	step down dc-dc converter	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2005/06/01 10:09
S34	2	S33 and (current near (step up))	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2005/06/01 10:08
S35	21	("4172260" "4218647" "4408267" "4430608" "4450384" "4575668" "4672228" "4908856" "4914356" "4920302" "4988942" "5036253" "5041767" "5144202" "5148158" "5150014" "5154504" "5155415" "5164638" "5182503" "5194803").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/06/01 10:14
S36	66	vehicle and (LED or (light adj emitting adj diode)) and (voltage and DC and conversion and (step-down or (step adj down)))	US-PGPUB; USPAT; USOCR	OR	OFF	2005/06/01 10:15
S37	8	S36 and (stepup or (step adj up))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 10:17

EAST Search History

S38	27	S36 and ((high of higher) adj current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/06/01 10:17
S39	1	("6152590").PN.	USPAT; USOCR	OR	OFF	2005/06/01 10:50
S40	1	("6317248").PN.	USPAT; USOCR	OR	OFF	2005/06/01 14:07
S41	19	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/03/05 13:29
S43	20	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/04/21 11:54
S44	1427	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S45	16	((362/800).CCLS.) and ((vehicle or auto or car or automobile) and (high adj intensity) and (heat adj sink))	USPAT	OR	OFF	2006/04/21 12:06
S46	13	("3474381" "4124881" "4654629" "4680678" "4893223" "4929866" "4977487" "5006971" "5084804" "5101326" "5162696" "5319531" "5436809").PN.	USPAT	OR	OFF	2006/04/21 12:06
S47	52	"5567036".URPN.	USPAT	OR	OFF	2006/04/21 12:06
S48	840	(362/488,494,545).CCLS.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S49	176	((362/800).CCLS.) and ((362/488, 494,545).CCLS.)	USPAT	OR	OFF	2006/04/21 12:06
S50	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2006/04/21 12:06

EAST Search History

S51	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2006/04/21 12:06
S52	0	((362/800).CCLS.) and (chip and refelctor and (heat adj sink))	USPAT	OR	OFF	2006/04/21 12:06
S53	39	((362/800).CCLS.) and (chip and reflector and (heat adj sink))	USPAT	OR	OFF	2006/04/21 12:06
S54	112	((362/800).CCLS.) and (high adj power)	USPAT	OR	OFF	2006/04/21 12:06
S55	0	((362/800).CCLS.) and (refelctor or refelctive)	USPAT	OR	OFF	2006/04/21 12:06
S56	595	((362/800).CCLS.) and (reflector or reflective)	USPAT	OR	OFF	2006/04/21 12:06
S57	1427	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S58	25	"3821590".URPN.	USPAT	OR	OFF	2006/04/21 12:06
S59	4	("3510732" "3860847" "4035681" "4070568").PN.	USPAT	OR	OFF	2006/04/21 12:06
S60	9	("3354316" "3400311" "3404319" "3419762" "3510732" "3528169" "3676668" "3696263" "3739241").PN.	USPAT	OR	OFF	2006/04/21 12:06
S61	25	"3510732".URPN.	USPAT	OR	OFF	2006/04/21 12:06
S62	2	("3458779").PN.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S63	284	((362/800).CCLS.) and aluminum	USPAT	OR	OFF	2006/04/21 12:06
S64	1427	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S65	181	S64 and ray	USPAT	OR	OFF	2006/04/21 12:06
S66	4	S65 and Ray.inv.	USPAT	OR	OFF	2006/04/21 12:06
S67	35	"054,633"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S68	1427	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S69	0	S68 and (stepping near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06

EAST Search History

S70	1	S68 and (step near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S71	72	S68 and (transformer)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S72	0	S68 and ((step adj up) near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S73	13	S68 and (step adj up)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S74	282	(step adj up) near current	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S75	43	S74 and (LED or (light adj emitting adj diode))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S76	164	step down dc-dc converter	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/04/21 12:06
S77	3	S76 and (current near (step up))	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/04/21 12:06
S78	164	step down dc-dc converter	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/04/21 12:06
S79	21	("4172260" "4218647" "4408267" "4430608" "4450384" "4575668" "4672228" "4908856" "4914356" "4920302" "4988942" "5036253" "5041767" "5144202" "5148158" "5150014" "5154504" "5155415" "5164638" "5182503" "5194803").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/21 12:06
S80	84	vehicle and (LED or (light adj emitting adj diode)) and (voltage and DC and conversion and (step-down or (step adj down)))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/21 12:06
S81	18	S80 and (stepup or (step adj up))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S82	40	S80 and ((high of higher) adj current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/21 12:06
S83	1	("6152590").PN.	USPAT; USOCR	OR	OFF	2006/04/21 12:06

EAST Search History

S84	1	("6317248").PN.	USPAT; USOCR	OR	OFF	2006/04/21 12:06
S85	20	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/04/21 12:06
S86	20	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/04/21 12:06
S87	1489	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/09/05 12:07
S89	665	(362/545).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/10/20 09:53
S90	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S91	22	((362/800).CCLS.) and ((vehicle or auto or car or automobile) and (high adj intensity) and (heat adj sink))	USPAT /	OR	OFF	2006/10/20 09:32
S92	13	("3474381" "4124881" "4654629" "4680678" "4893223" "4929866" "4977487" "5006971" "5084804" "5101326" "5162696" "5319531" "5436809").PN.	USPAT	OR	OFF	2006/10/20 09:32
S93	60	"5567036".URPN.	USPAT	OR	OFF	2006/10/20 09:32
S94	906	(362/488,494,545).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S95	193	((362/800).CCLS.) and ((362/488, 494,545).CCLS.)	USPAT	OR	OFF	2006/10/20 09:32

EAST Search History

S96	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2006/10/20 09:32
S97	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2006/10/20 09:32
S98	0	((362/800).CCLS.) and (chip and refelctor and (heat adj sink))	USPAT	OR	OFF	2006/10/20 09:32
S99	46	((362/800).CCLS.) and (chip and reflector and (heat adj sink))	USPAT	OR	OFF	2006/10/20 09:32
S100	121	((362/800).CCLS.) and (high adj power)	USPAT	OR	OFF	2006/10/20 09:32
S101	0	((362/800).CCLS.) and (refelctor or refelctive)	USPAT	OR	OFF	2006/10/20 09:32
S102	640	((362/800).CCLS.) and (reflector or reflective)	USPAT	OR	OFF	2006/10/20 09:32
S103	26	"3821590".URPN.	USPAT	OR	OFF	2006/10/20 09:32
S104	4	("3510732" "3860847" "4035681" "4070568").PN.	USPAT	OR	OFF	2006/10/20 09:32
S105	9	("3354316" "3400311" "3404319" "3419762" "3510732" "3528169" "3676668" "3696263" "3739241").PN.	USPAT	OR	OFF	2006/10/20 09:32
S106	28	"3510732".URPN.	USPAT	OR	OFF	2006/10/20 09:32
S107	2	("3458779").PN.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S108	304	((362/800).CCLS.) and aluminum	USPAT	OR	OFF	2006/10/20 09:32
S109	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S110	190	S109 and ray	USPAT	OR	OFF	2006/10/20 09:32

EAST Search History

S11 1	4	S110 and Ray.inv.	USPAT	OR	OFF	2006/10/20 09:32
S11 2	47	"054,633"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S11 3	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S11 4	0	S113 and (stepping near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S11 5	2	S113 and (step near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S11 6	81	S113 and (transformer)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S11 7	0	S113 and ((step adj up) near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S11 8	16	S113 and (step adj up)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S11 9	297	(step adj up) near current	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S12 0	44	S119 and (LED or (light adj emitting adj diode))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S12 1	192	step down dc-dc converter	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/10/20 09:32
S12 2	3	S121 and (current near (step up))	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/10/20 09:32
S12 3	21	("4172260" "4218647" "4408267" "4430608" "4450384" "4575668" "4672228" "4908856" "4914356" "4920302" "4988942" "5036253" "5041767" "5144202" "5148158" "5150014" "5154504" "5155415" "5164638" "5182503" "5194803").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 09:32
S12 4	88	vehicle and (LED or (light adj emitting adj diode)) and (voltage and DC and conversion and (step-down or (step adj down)))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 09:32

EAST Search History

S12 5	20	S124 and (stepup or (step adj up))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S12 6	42	S124 and ((high of higher) adj current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S12 7	1	("6152590").PN.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S12 8	1	("6317248").PN.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S12 9	23	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/10/20 09:32
S13 0	23	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/10/20 09:32
S13 1	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S13 2	906	(362/488,494,545).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S13 3	0	((362/800).CCLS.) and (chip and refelctor and (heat adj sink))	USPAT	OR	OFF	2006/10/20 09:32
S13 4	0	((362/800).CCLS.) and (refelctor or refelctive)	USPAT	OR	OFF	2006/10/20 09:32
S13 5	640	((362/800).CCLS.) and (reflector or reflective)	USPAT	OR	OFF	2006/10/20 09:32
S13 6	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S13 7	190	S136 and ray	USPAT	OR	OFF	2006/10/20 09:32
S13 8	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S13 9	0	S138 and (stepping near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32

EAST Search History

S14 0	81	S138 and (transformer)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S14 1	0	S138 and ((step adj up) near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S14 2	297	(step adj up) near current	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S14 3	192	step down dc-dc converter	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/10/20 09:32
S14 4	88	vehicle and (LED or (light adj emitting adj diode)) and (voltage and DC and conversion and (step-down or (step adj down)))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 09:32
S14 5	2	S138 and (step near current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S14 6	1	("6152590").PN.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S14 7	1	("6317248").PN.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S14 8	22	((362/800).CCLS.) and ((vehicle or auto or car or automobile) and (high adj intensity) and (heat adj sink))	USPAT	OR	OFF	2006/10/20 09:32
S14 9	13	("3474381" "4124881" "4654629" "4680678" "4893223" "4929866" "4977487" "5006971" "5084804" "5101326" "5162696" "5319531" "5436809").PN.	USPAT	OR	OFF	2006/10/20 09:32
S15 0	60	"5567036".URPN.	USPAT	OR	OFF	2006/10/20 09:32
S15 1	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2006/10/20 09:32

EAST Search History

S15 2	21	("4271408" "4293847" "4632798" "4654629" "4729076" "4733335" "4774434" "4826896" "4851972" "4929866" "4935665" "4951179" "5038255" "5062027" "5162696" "5241457" "5268828" "5278432" "5278731" "5313729" "5345705").PN.	USPAT	OR	OFF	2006/10/20 09:32
S15 3	46	((362/800).CCLS.) and (chip and reflector and (heat adj sink))	USPAT	OR	OFF	2006/10/20 09:32
S15 4	26	"3821590".URPN.	USPAT	OR	OFF	2006/10/20 09:32
S15 5	4	("3510732" "3860847" "4035681" "4070568").PN.	USPAT	OR	OFF	2006/10/20 09:32
S15 6	9	("3354316" "3400311" "3404319" "3419762" "3510732" "3528169" "3676668" "3696263" "3739241").PN.	USPAT	OR	OFF	2006/10/20 09:32
S15 7	28	"3510732".URPN.	USPAT	OR	OFF	2006/10/20 09:32
S15 8	2	("3458779").PN.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S15 9	4	S137 and Ray.inv.	USPAT	OR	OFF	2006/10/20 09:32
S16 0	47	"054,633"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S16 1	16	S138 and (step adj up)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S16 2	44	S142 and (LED or (light adj emitting adj diode))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S16 3	3	S143 and (current near (step up))	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/10/20 09:32
S16 4	21	("4172260" "4218647" "4408267" "4430608" "4450384" "4575668" "4672228" "4908856" "4914356" "4920302" "4988942" "5036253" "5041767" "5144202" "5148158" "5150014" "5154504" "5155415" "5164638" "5182503" "5194803").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 09:32

EAST Search History

S16 5	20	S144 and (stepup or (step adj up))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S16 6	42	S144 and ((high of higher) adj current)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/10/20 09:32
S16 7	23	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/10/20 09:32
S16 8	23	("4211955" "5160200" "5160201" "5567036" "5806965" "5921660" "5929788" "5947588" "6220722" "6234648" "6371636" "D385051" "D404506" "D405201" "D434510").PN. OR ("6598996"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/10/20 09:32
S16 9	193	((362/800).CCLS.) and ((362/488, 494,545).CCLS.)	USPAT	OR	OFF	2006/10/20 09:32
S17 0	121	((362/800).CCLS.) and (high adj power)	USPAT	OR	OFF	2006/10/20 09:32
S17 1	192	step down dc-dc converter	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2006/10/20 09:32
S17 2	304	((362/800).CCLS.) and aluminum	USPAT	OR	OFF	2006/10/20 09:32
S17 3	1510	(362/800).CCLS.	USPAT; USOCR	OR	OFF	2006/10/20 09:32
S17 4	463	S173 and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (refractor or refractors or lens or lenses or ((optical or transluscent or translucent or transparent or (optically active)) (element or member or component or device)))	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 09:32
S17 5	685	(362/545).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/10/20 09:32

EAST Search History

S17 6	337	S175 and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (refractor or refractors or lens or lenses or ((optical or translucent or transparent or (optically active)) (element or member or component or device)))	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 09:32
S17 7	714	(S173 or S175) and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (refractor or refractors or lens or lenses or ((optical or translucent or transparent or (optically active)) (element or member or component or device)))	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 09:32
S17 8	39	((LED or LEDs or (L E D) or (light (emitting or producing or generating or radiating) (diode or diodes or device or devices or element or elements or semiconductor or (semi conductor) or (circuit element)))) and (housing or housin or housed or casing or casin or case or shell or container or box or boxes or enclosure or enclosures or cover or covers) and (refractor or refractors or lens or lenses or ((optical or translucent or transparent or (optically active)) (element or member or component or device))) and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (heat (sink or ((extracting or conducting or dissipating or transporting or radiating) (fin or protrusion or projection or element or member or spike or tubes or fingers or portion or pillars or plate)) or plate))).clm.	US-PGPUB	ADJ	ON	2006/10/20 10:35

EAST Search History

S17 9	2778	((LED or LEDs or (L E D) or (light (emitting or producing or generating or radiating) (diode or diodes or device or devices or element or elements or semiconductor or (semi conductor) or (circuit element)))) and (housing or housin or housed or casing or casin or case or shell or container or box or boxes or enclosure or enclosures or cover or covers) and (refractor or refractors or lens or lenses or ((optical or translucent or translucent or transparent or (optically active)) (element or member or component or device))) and (reflector or reflectors or mirror or mirrors or (reflective (member or members or plane or planes or surface or surfaces or element or elements or plate or plates))) and (heat (sink or ((extracting or conducting or dissipating or transporting or radiating) (fin or protrusion or projection or element or member or spike or tubes or fingers or portion or pillars or plate)) or plate)))	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 10:39
S18 0	678	S179 and @pd<"20020122"	US-PGPUB; USPAT; USOCR; EPO; JPO	ADJ	ON	2006/10/20 10:41